

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application.

Claims 1-26 (Canceled).

Claim 27. (New) A simulation method comprising:

storing simulation models having different degrees of details, the models including at least a macro model requiring a low amount of calculation and a low degree of precision of simulation and a micro model requiring a large amount of calculation and a high degree of precision of simulation, the models simulating a state of a moving object;

setting a simulation condition, an initial state of the moving object, and a selection condition;

first selecting one of the models based on the selection condition;

performing a simulation by a simulator based on the selected model, the simulation condition, and the initial state of the moving object;

secondly selecting, during the simulation, one of the models based on the selection condition and a result of the simulation and determining whether or not the first selected model for simulating the state of the moving object is different from the secondly selected model; and

setting the secondly selected model to the simulator to perform the simulation based on the secondly selected model when the first selected model for simulating the state of the moving object is different from the secondly selected model.

Claim 28. (New) A method according to claim 27, wherein said selection condition includes changing information to change the selected simulation model, the changing information designating simulation models which are different from each other based on a state of the result of the simulation and a threshold value set in advance with respect to a state of the moving object.

Claim 29. (New) A method according to claim 28, wherein the models include a variable, and further comprising:

reading out the variable of a presently selected model;

converting a value the variable of the first model to a value a variable of the secondly selected model; and

setting the converted value to the variable of the secondly selected model.

Claim 30. (New) A method according to claim 29, wherein said converting includes carrying out a conversion of the variable based on a conversion rule which describes a conversion relation of the variables between the models, by using a state of the moving object.

Claim 31. (New) A method according to claim 27, wherein said selection condition includes designating a simulation model directly.

Claim 32. (New) A method according to claim 27, wherein said selection condition includes dividing a space in which said moving object moves into segments and designating a simulation model for each segment.

Claim 33. (New) A method according to claim 32, wherein said selection condition includes designating one of the segments and designating a simulation model for the designated segment.

Claim 34. (New) A method according to claim 27, wherein said selection condition includes dividing a simulation time into partial times and designating a simulation model for each partial time.

Claim 35. (New) A method according to claim 34, wherein said selection condition includes designating one of the partial times and designating a simulation model for the designated partial time.

Claim 36. (New) A method according to claim 27, wherein said selection condition includes dividing a space in which said moving object moves into segments, dividing a simulation time into partial times and designating a simulation model in association with a combination of one of the segments and one of the partial times.

Claim 37. (New) A method according to claim 36, wherein said selection condition includes designating one of the segments and one of the partial times and designating a simulation model in association with a combination of the designated segment and the designated partial time.